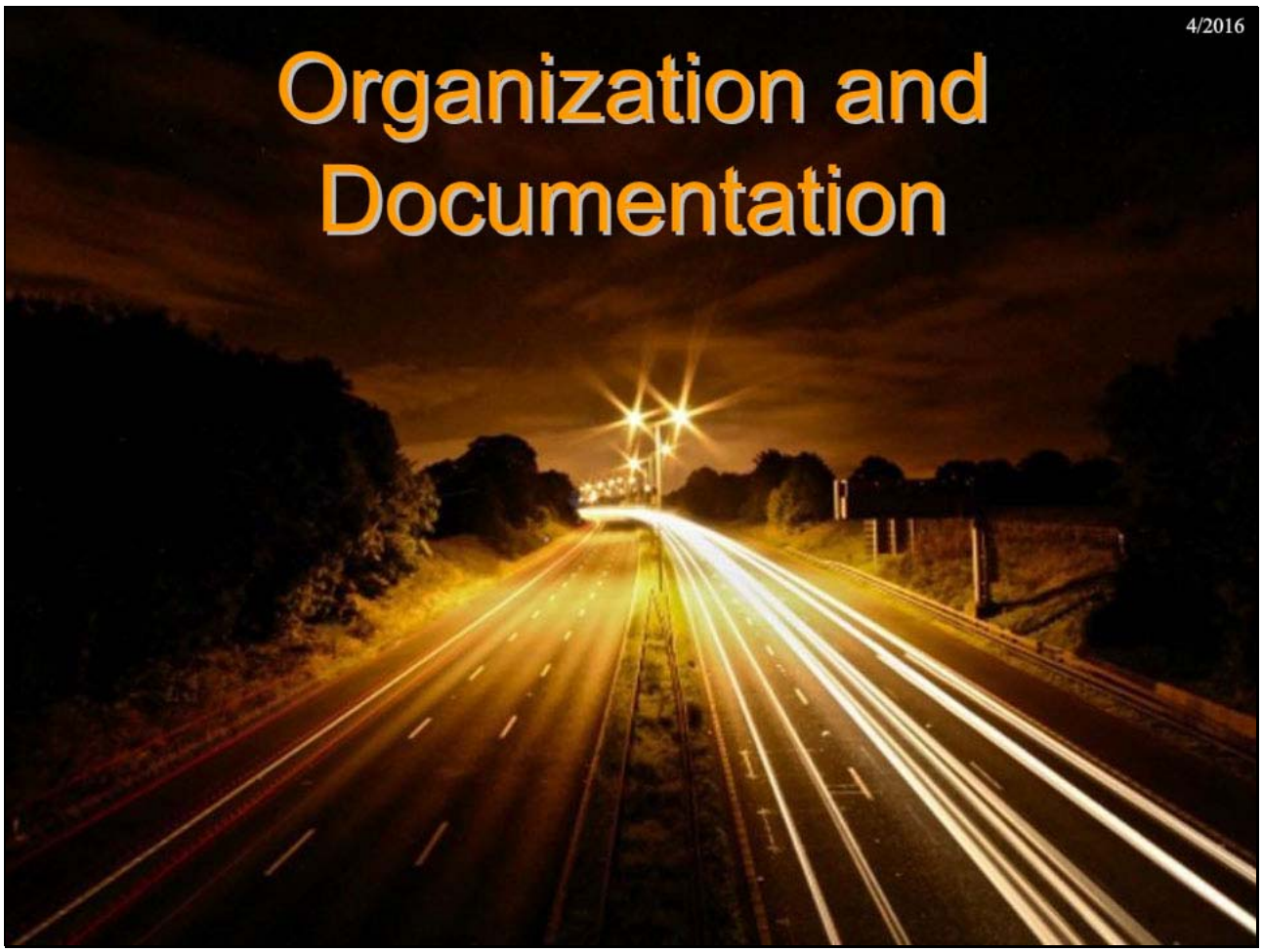
Slide 1 - Organization

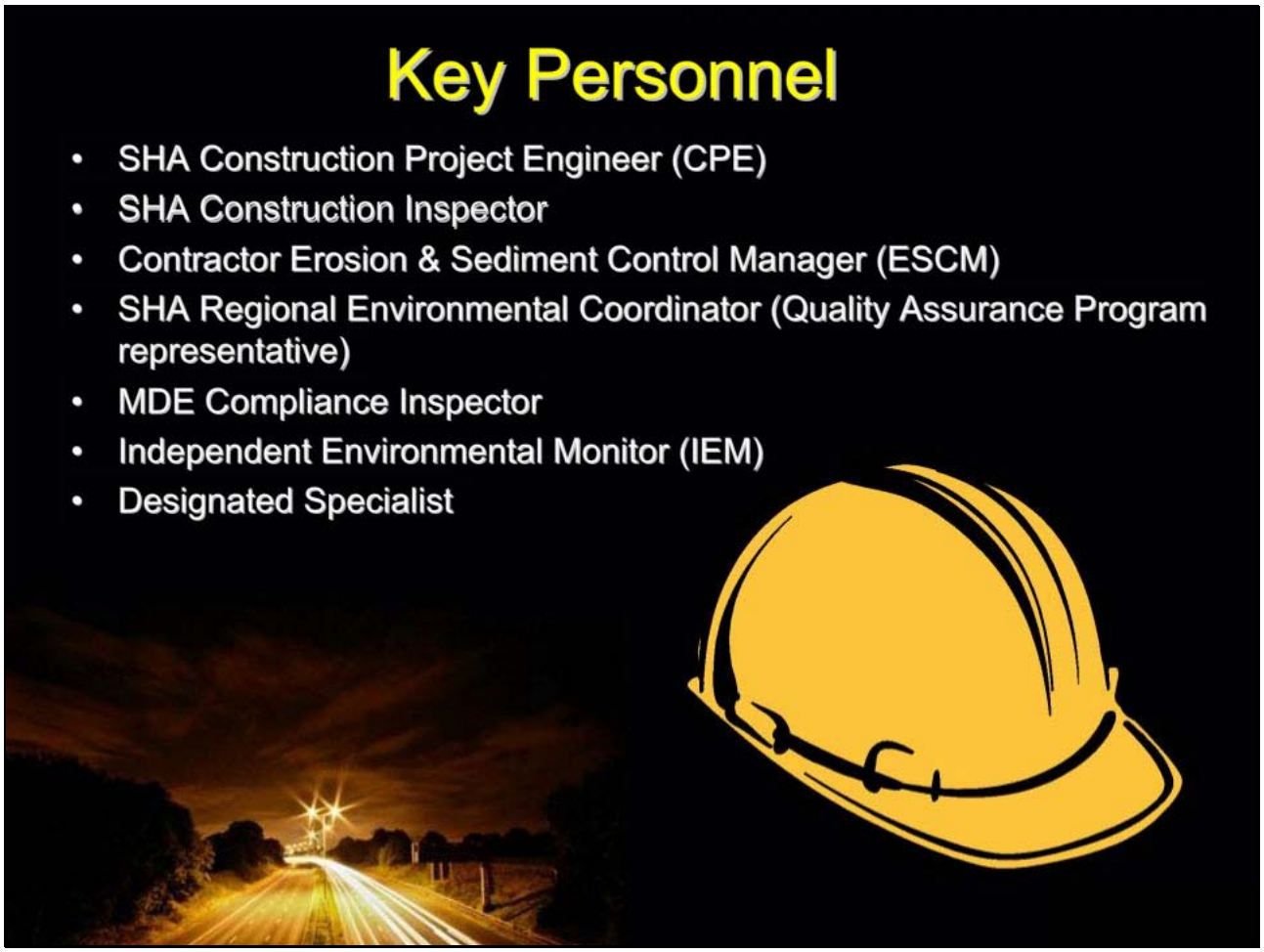


Slide notes

Now we will look at the different partners involved and documentation necessary in successfully completing a construction project.

Notes

Slide 2 - Key Personnel



Slide notes

There are several members of the construction team. These individuals represent SHA, the Contractor and also other agencies

Notes

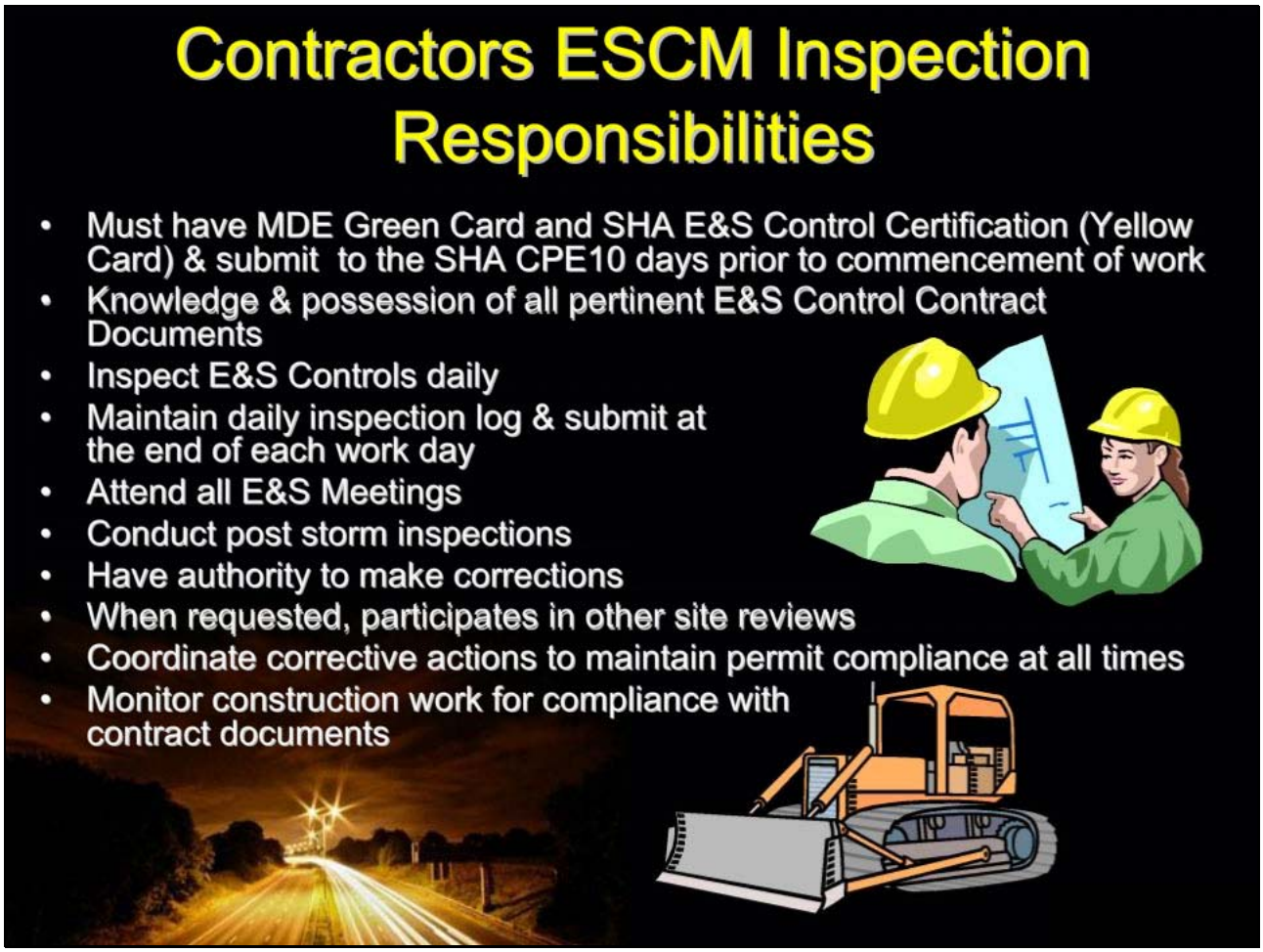
Slide 3 - SHA Construction Inspection Responsibilities

Slide notes

State Highway representatives have responsibilities centered around quality control and documentation. E & S Control installation and maintenance must be inspected regularly. A weekly project inspection must be conducted along with pre and post-storm inspections. The inspection staff has a responsibility to review any off-site permits related to the ongoing work. It is at this level of review that the Administration must ensure compliance with all contract documents and environmental permits such as the NPDES.

Notes

Slide 4 - Contractors ESCM Inspection Responsibilities

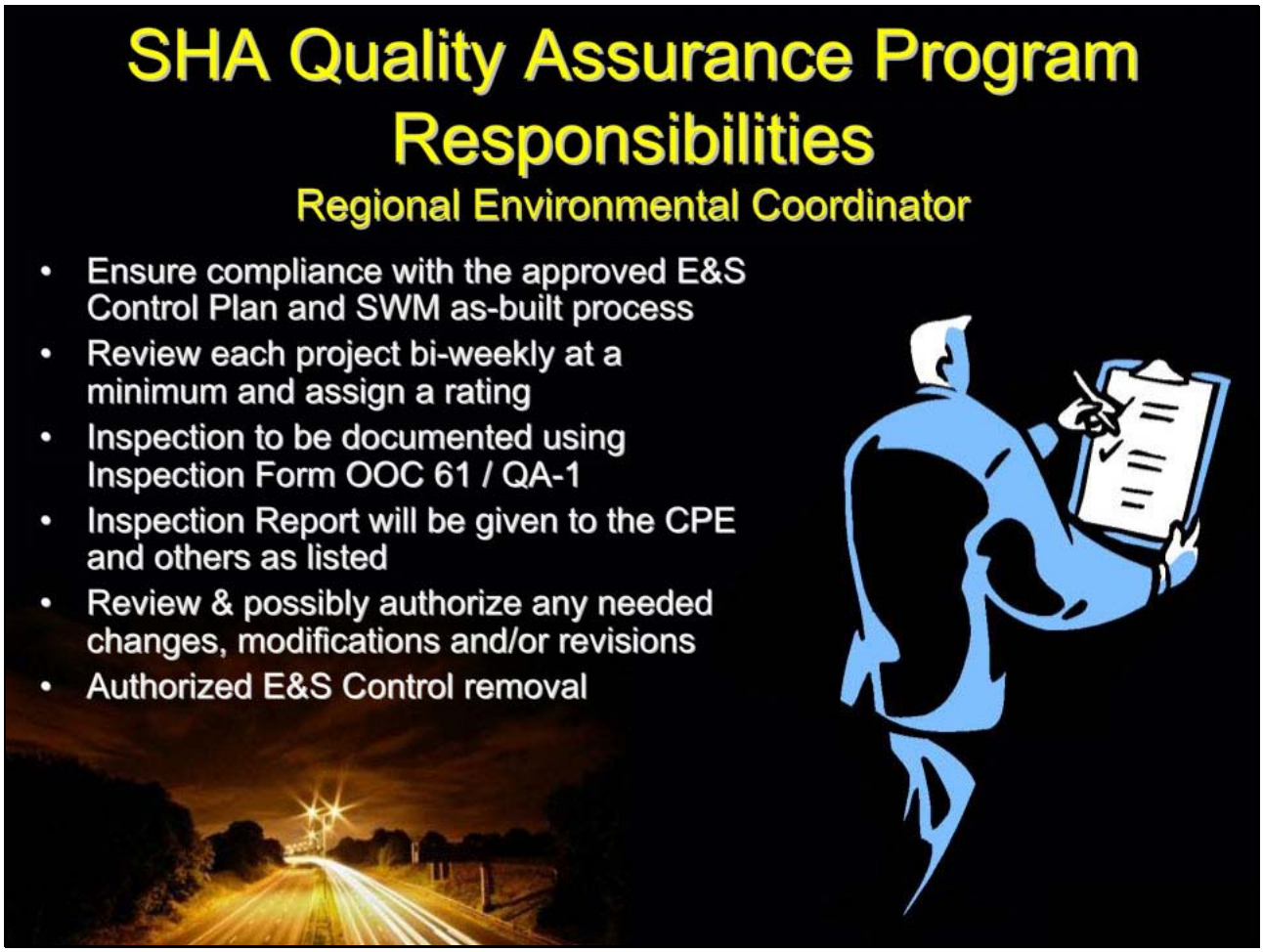


Slide notes

The Contractor also has specific responsibilities related to the environment. The Erosion and Sediment Control Manager (ESCM) must have both the MDE green card and the SHA yellow card certification. The ESCM must inspect and document the E & S Control condition on the project daily. This report is to be submitted to the Project Engineer per the specifications. It is imperative that the ESCM have the authority to coordinate any corrective actions necessary.

Notes

Slide 5 - SHA Quality Assurance Responsibilities Regional Environmental Coordinator

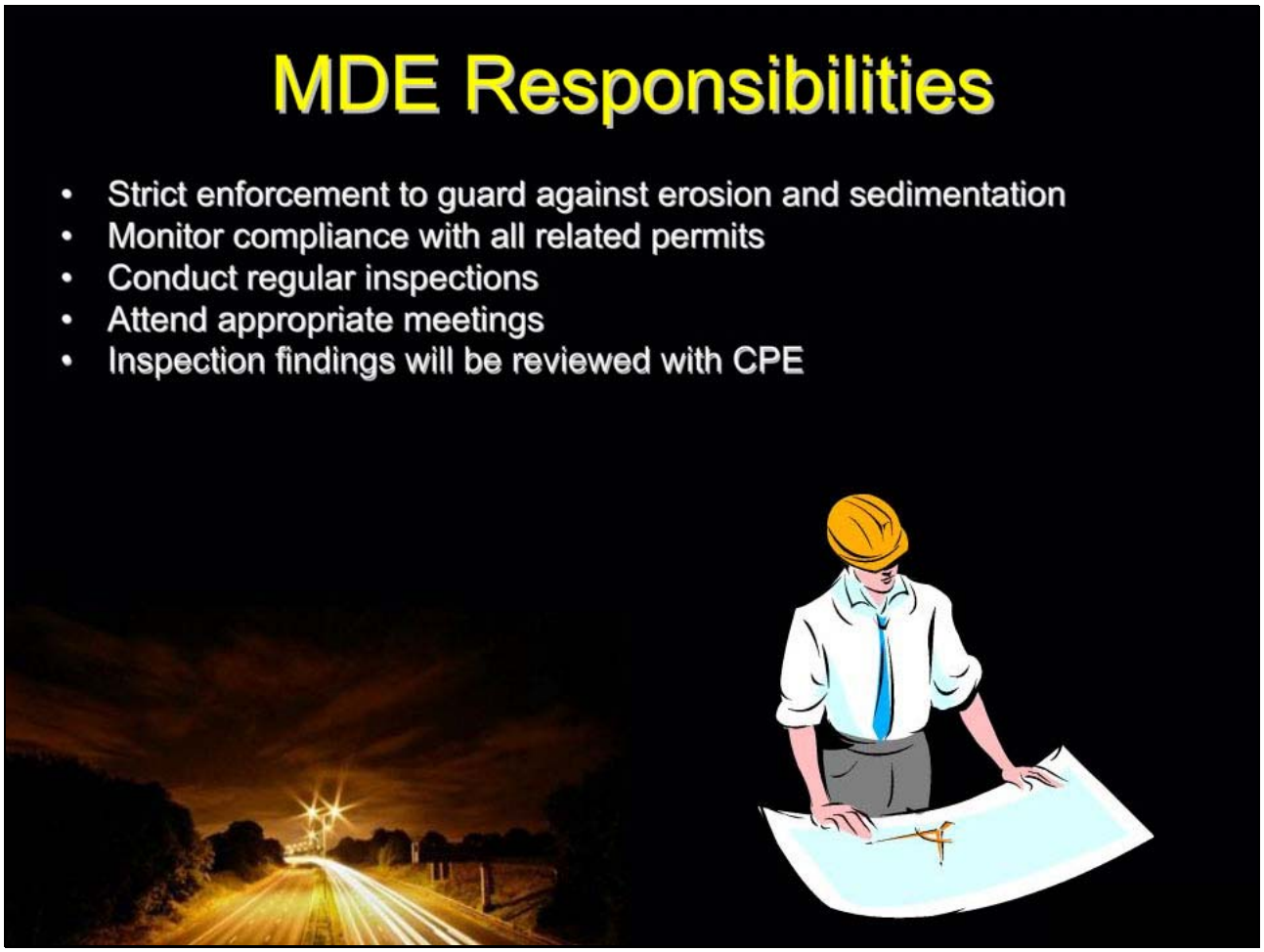


Slide notes

The Regional Environmental Coordinator has the responsibilities of conducting routine Quality Assurance Review on the project site. This is a objective graded review of the compliance status of the project and will be submitted to the Project Engineer to be included as part of the project record.

Notes

Slide 6 - MDE Responsibilities

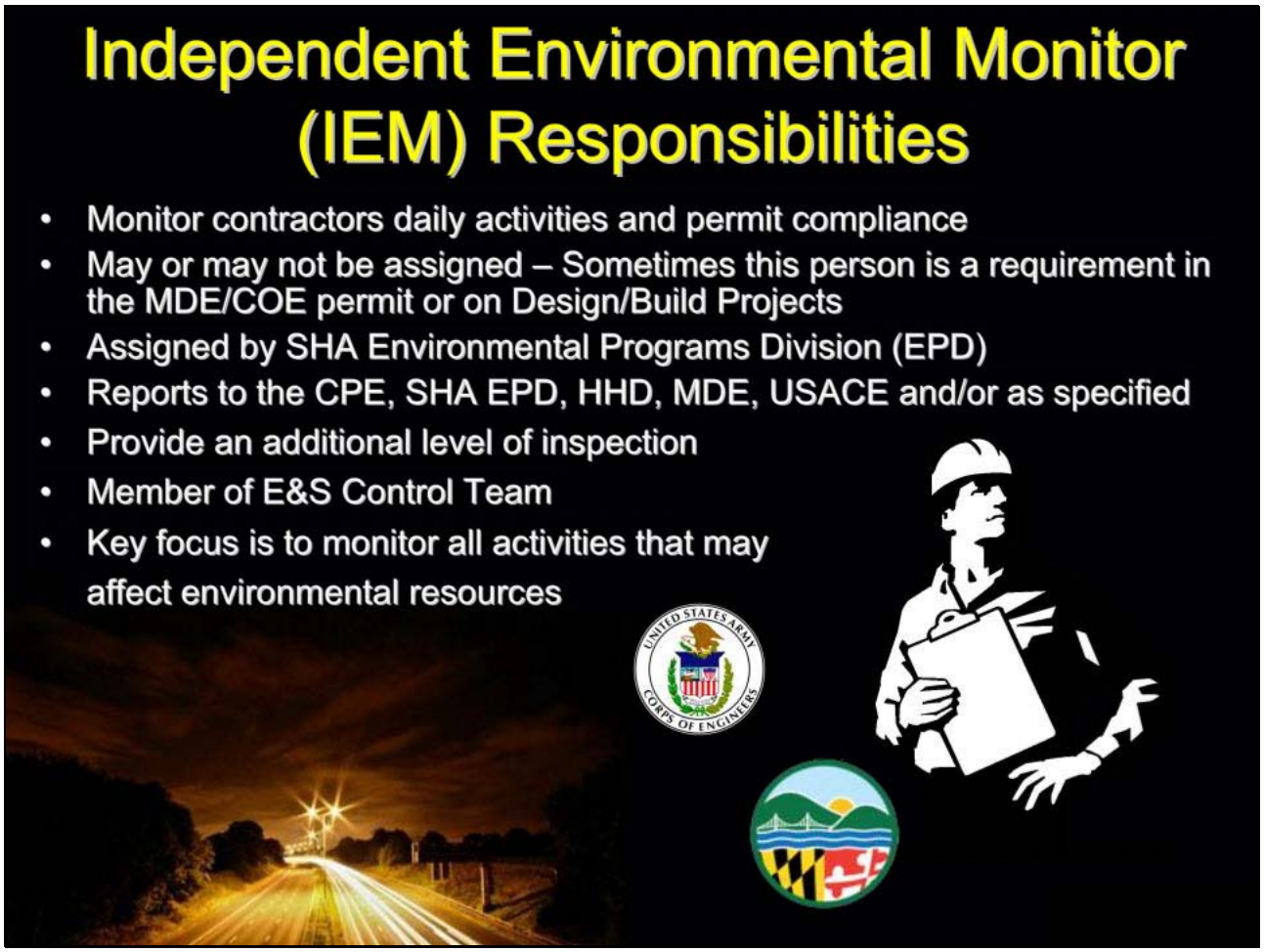


Slide notes

The Maryland Department of Environment has a responsibility to enforce the regulations and laws of the state with regards to environmental issues. MDE will conduct site reviews at their discretion and their reviews are a necessary part of the modification process. MDE must approve the removal of E & S Controls when final stabilization has been established.

Notes

Slide 7 - Environmental Monitor (EM) Responsibilities



Slide notes

: A project may or may not have an environmental monitor. If required by a permit or deemed necessary by the administration this individual will be assigned by the environmental programs division of SHA. This team member has a responsibility of monitoring activities that impact environmental resources, and reporting to the required divisions within SHA and also to the regulatory agencies on a daily basis.

Notes

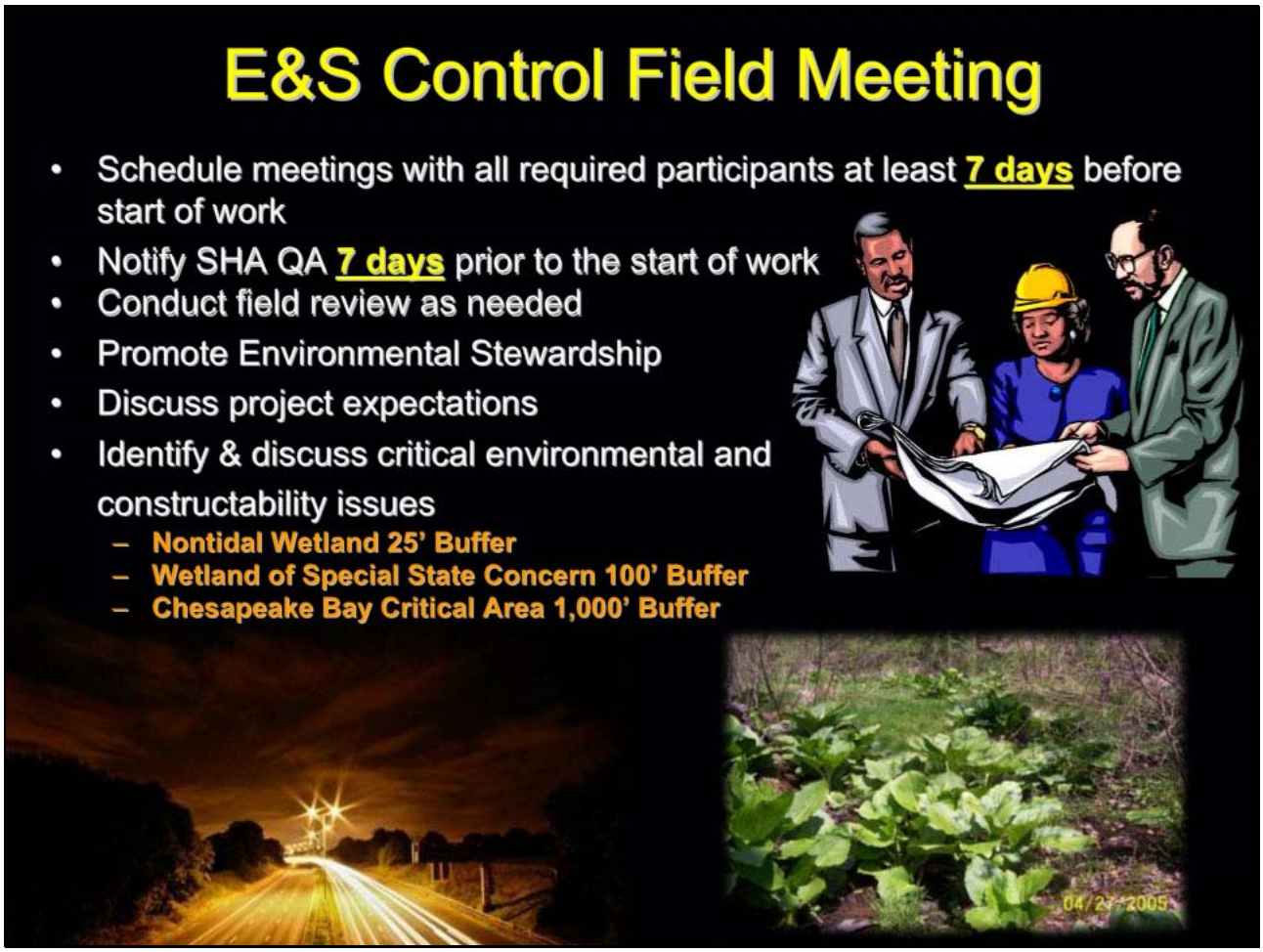
Slide 8 - Designated Specialist

Slide notes

A designated specialist may also be assigned to a project as a requirement of the contract documents. This person has an expertise in environmental design and construction and has an ability to make field adjustments during the construction process. Often this individual is involved with stream or wetland projects.

Notes

Slide 9 - E&S Control Field Meeting



Slide notes

The specification requires that an initial Erosion and Sediment Control Field Meeting be held prior to the start of work on any project. MDE should be notified of this meeting in order for them to have an opportunity to attend. This meeting is the opportunity to discuss the environmental concerns on the project and discuss any constructability issues.

Notes

Slide 10 - E&S Control Field Meeting

Slide notes

There are many people who typically attend this meeting. It is recommended to have as many project team members as possible at this meeting to ensure everyone's concern is discussed and to clear up any confusion that may arise after construction activities have begun.

Notes

Slide 11 - E&S Control Field Meeting

Slide notes

Many topics need to be discussed at this meeting. The responsibilities of each project stakeholder should be covered along with a complete review of the contract documents and permits for the work to be conducted. Methods of documentation should be reviewed with everyone in attendance. This meeting is an opportune time to discuss any modifications or changes that may be needed prior to the start of work.

Notes

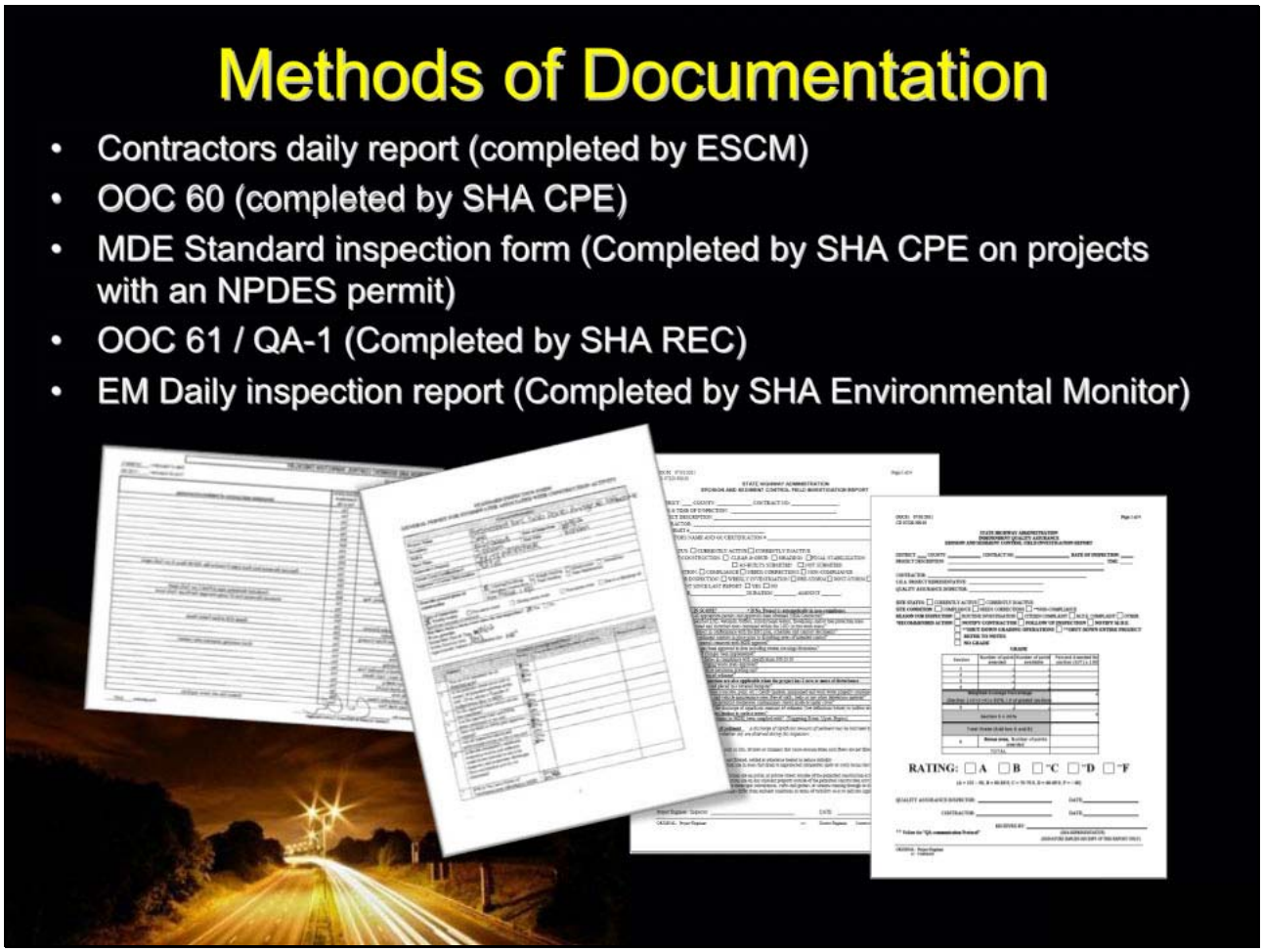
Slide 12 - Inspection Recommendations

Slide notes

Take the time necessary to become familiar with E and S control practices and reference documents that can help with proper site inspection. Construction sites are dynamic so take the time to do a thorough review. Document what you see accurately and take the time to communicate what is necessary to the project team. Photos are an effective method of documentation and may help to further clarify issues in the field.

Notes

Slide 13 - Methods of Documentation

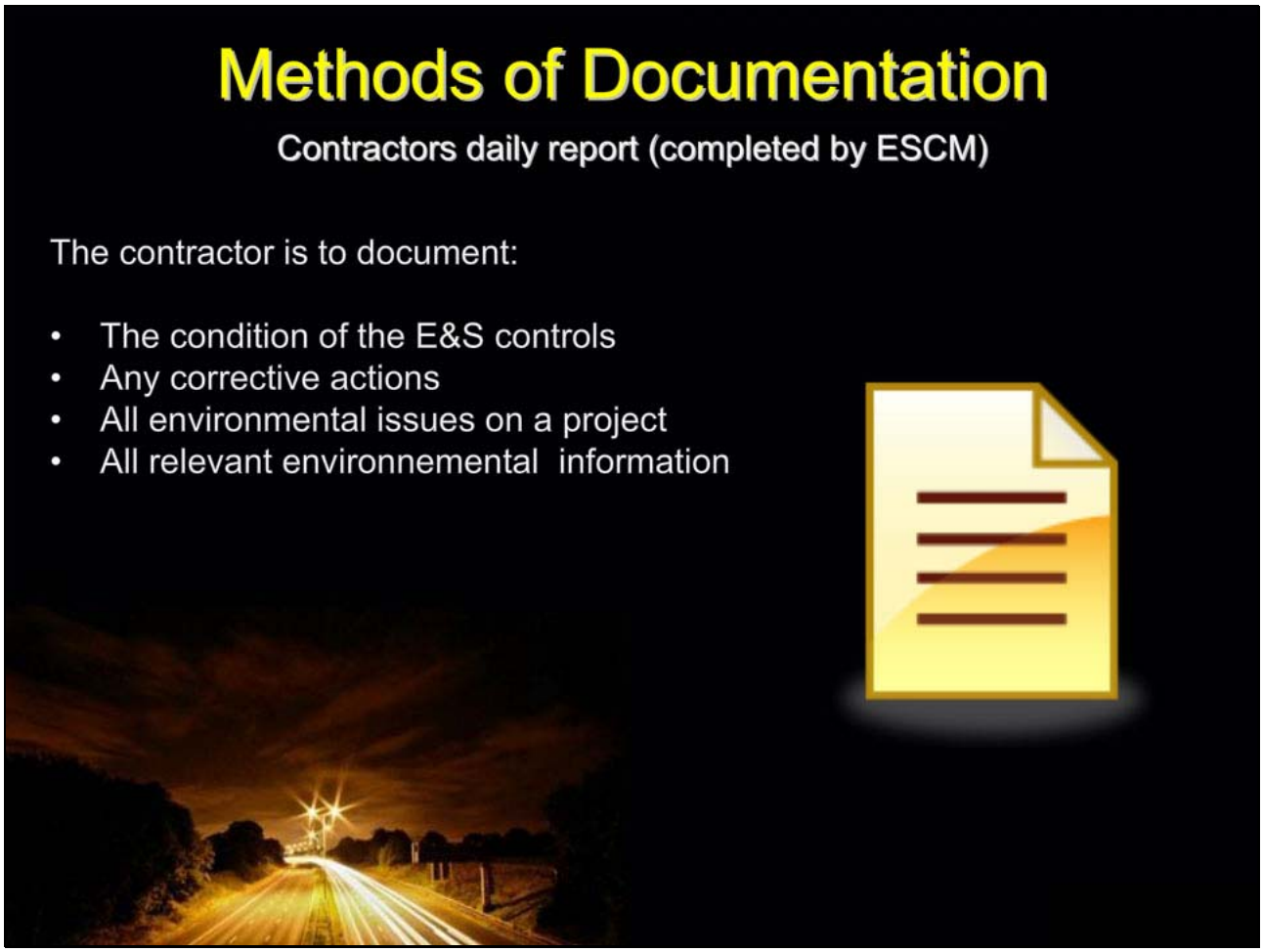


Slide notes

There are multiple methods of documentation on an S.H.A. project. Each team member will have a specific report or form to utilize from the contractors daily report to the MDE standard inspection that is completed by the Project Engineer. Take a moment to review the list of documents and responsibilities listed.

Notes

Slide 14 - Methods of Documentation

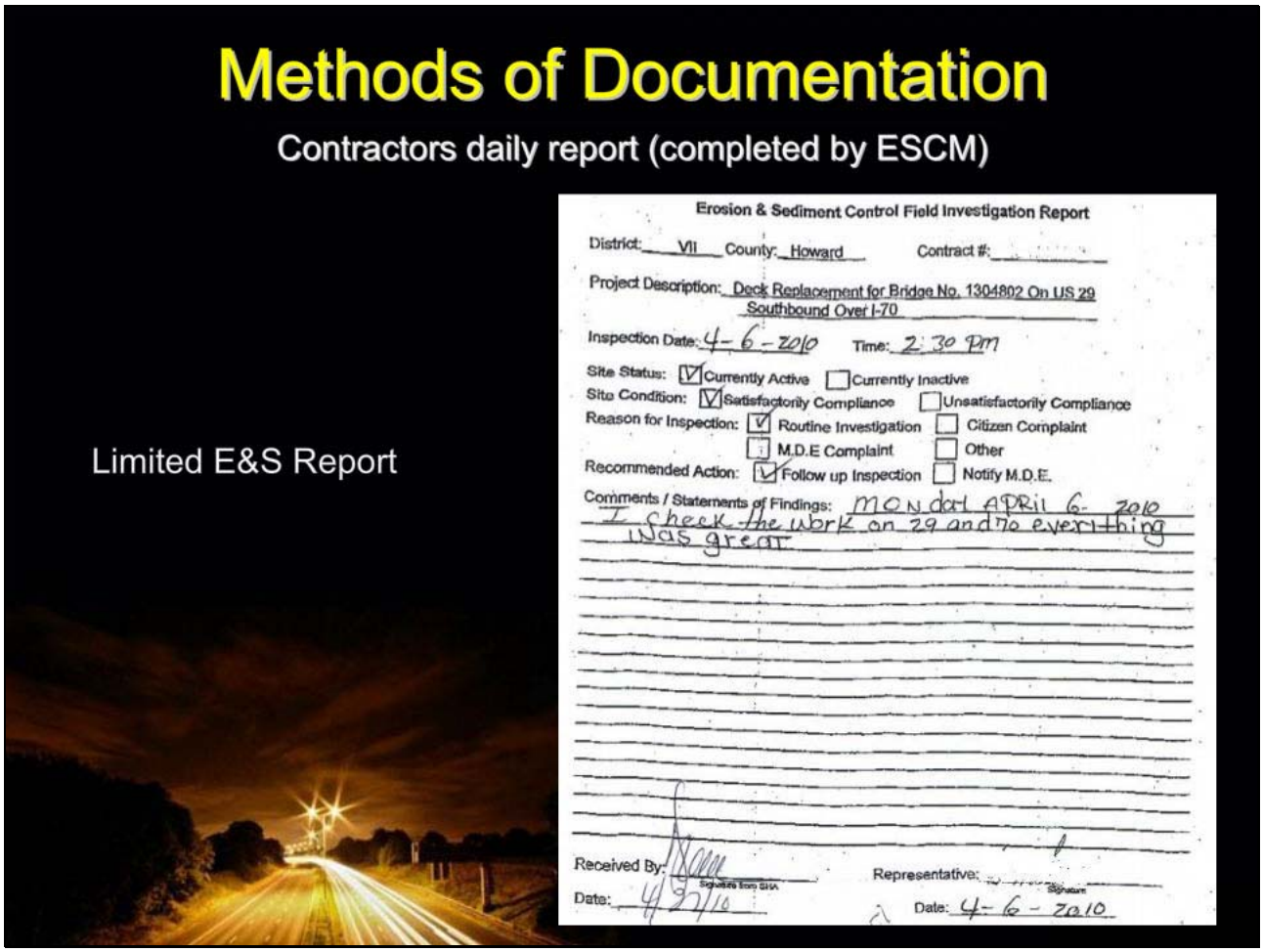


Slide notes

The contractor is responsible for providing a daily report. They are to document the condition of the E&S controls on the project including any corrective actions, issues on the project and/or other relevant environmental information. S.H.A does not specify the format for the contractor's daily report. The contractors develop their own daily report specific to each project.

Notes

Slide 15 - Methods of Documentation

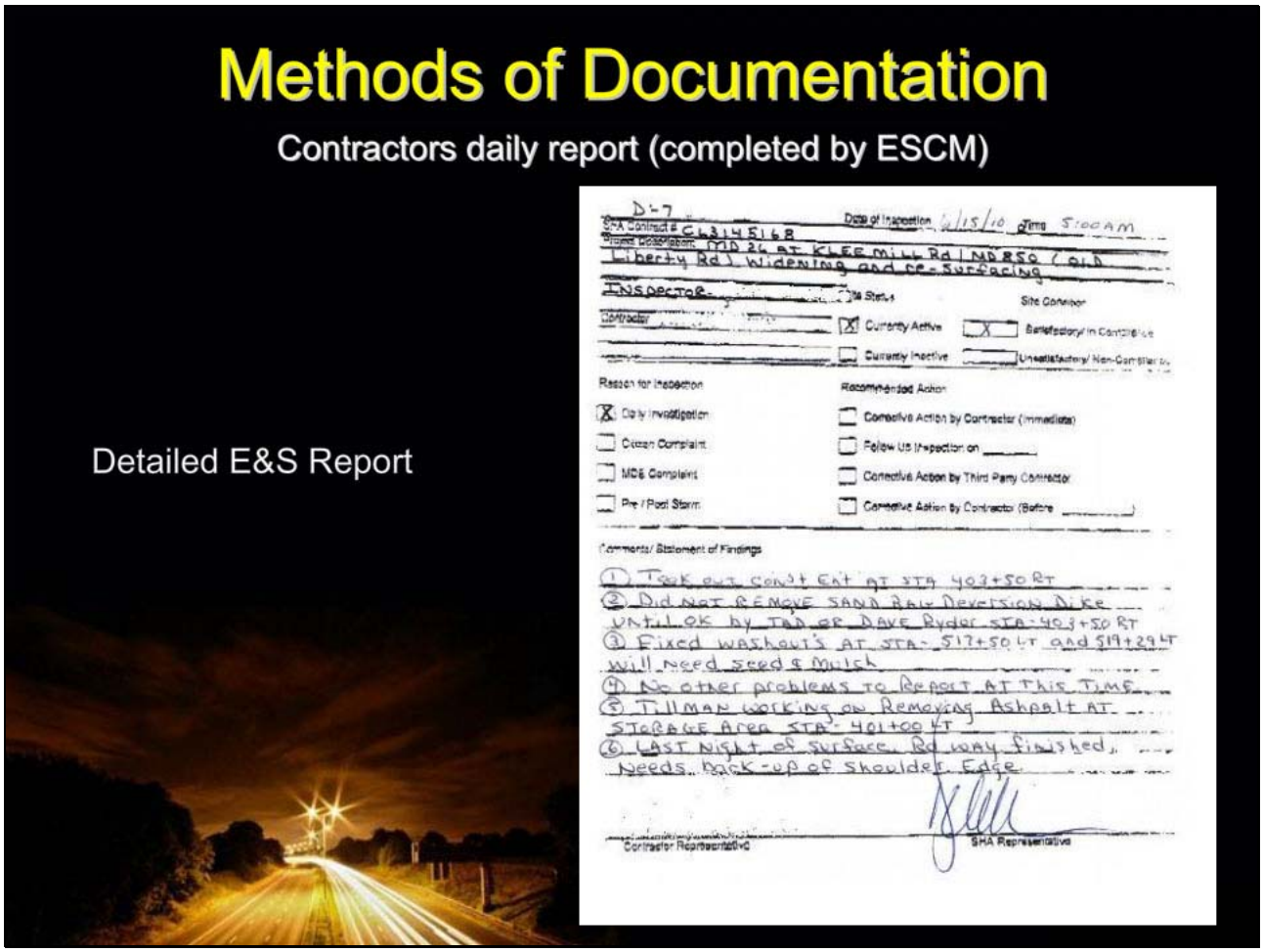


Slide notes

This example of a contractor's daily report is formatted in a way that is a variation of the S.H.A O.O.C 60 form. Contractors need to include accurate details in their reports. A limited report like this is acceptable only if it reflects the true field conditions.

Notes

Slide 16 - Methods of Documentation

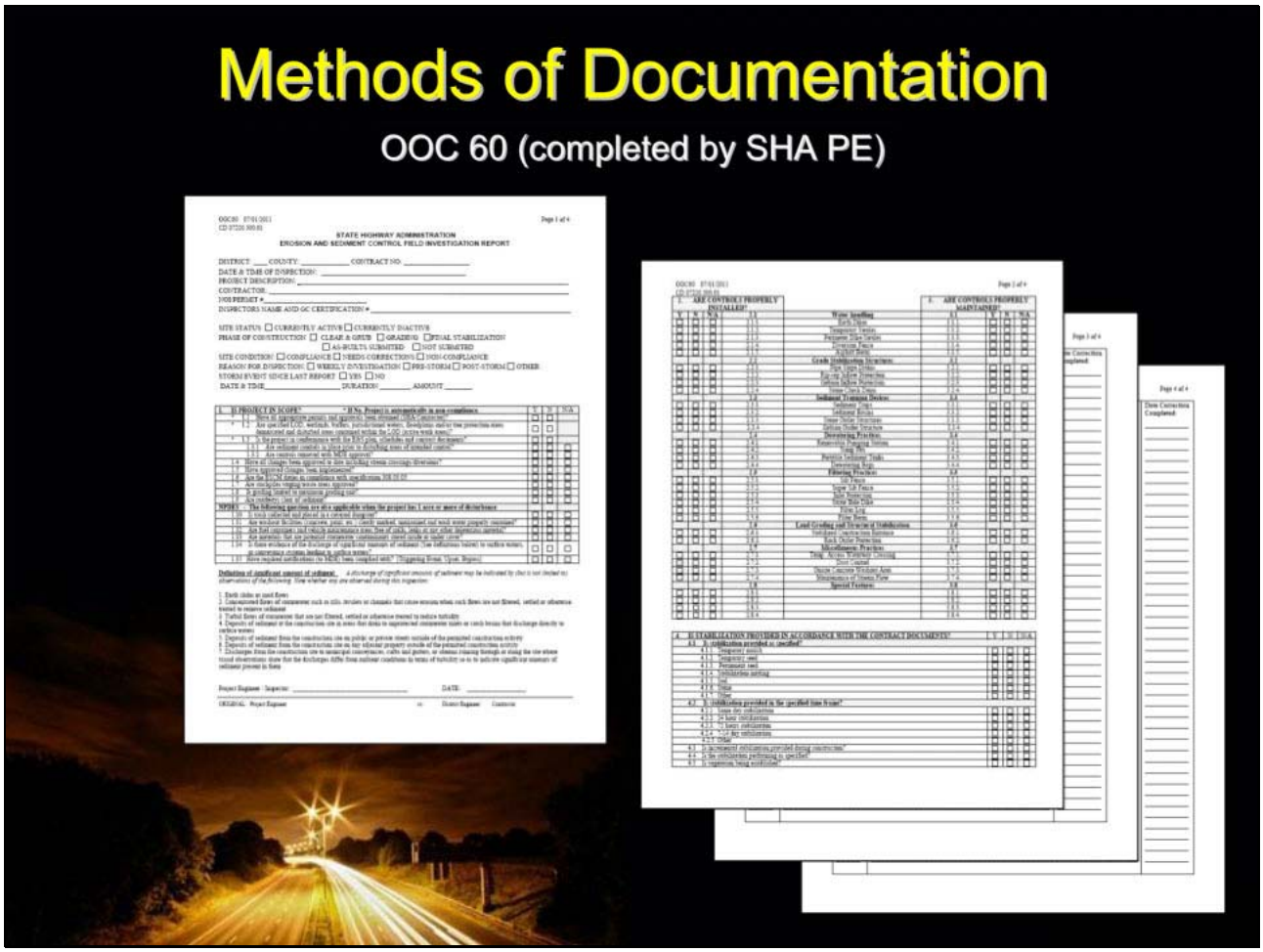


Slide notes

Here is an example of a more detailed report which is a variation of the OOC-60 form which includes numerous details such as repairs, control removal plans and work that is occurring on site. This report contains information that could possibly earn bonus points during a QA review of the project.

Notes

Slide 17 - Methods of Documentation

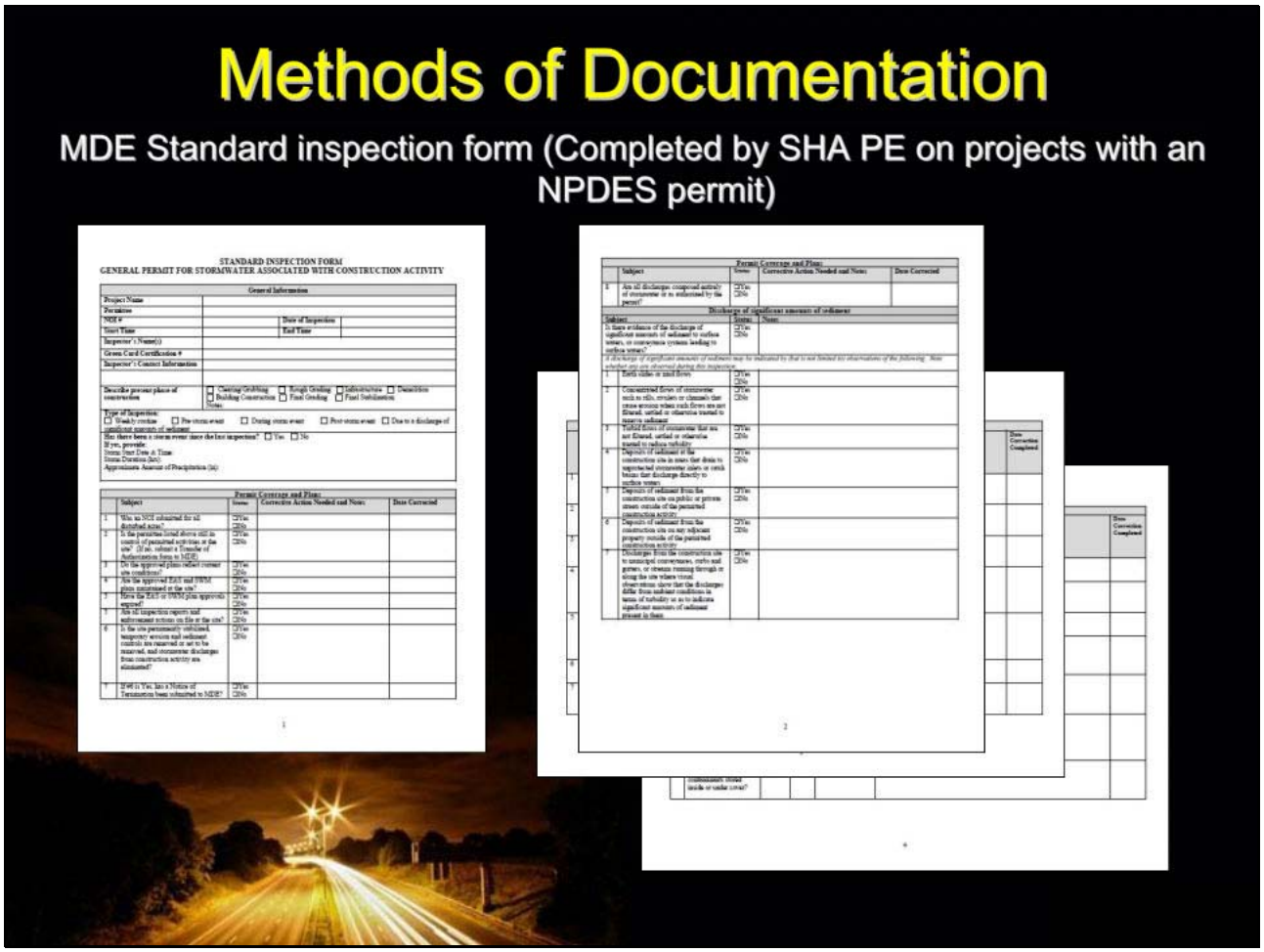


Slide notes

The intent of the SHA Field Checklist (O.O.C-60) is to combine information from the QA checklist and information related to the N.P.D.E.S permit standard inspection form. This form distinguishes between projects that are one acre or more in disturbance and those that are not. This form is to be completed by the Project Engineer per the Office of Construction Directives.

Notes

Slide 18 - Methods of Documentation

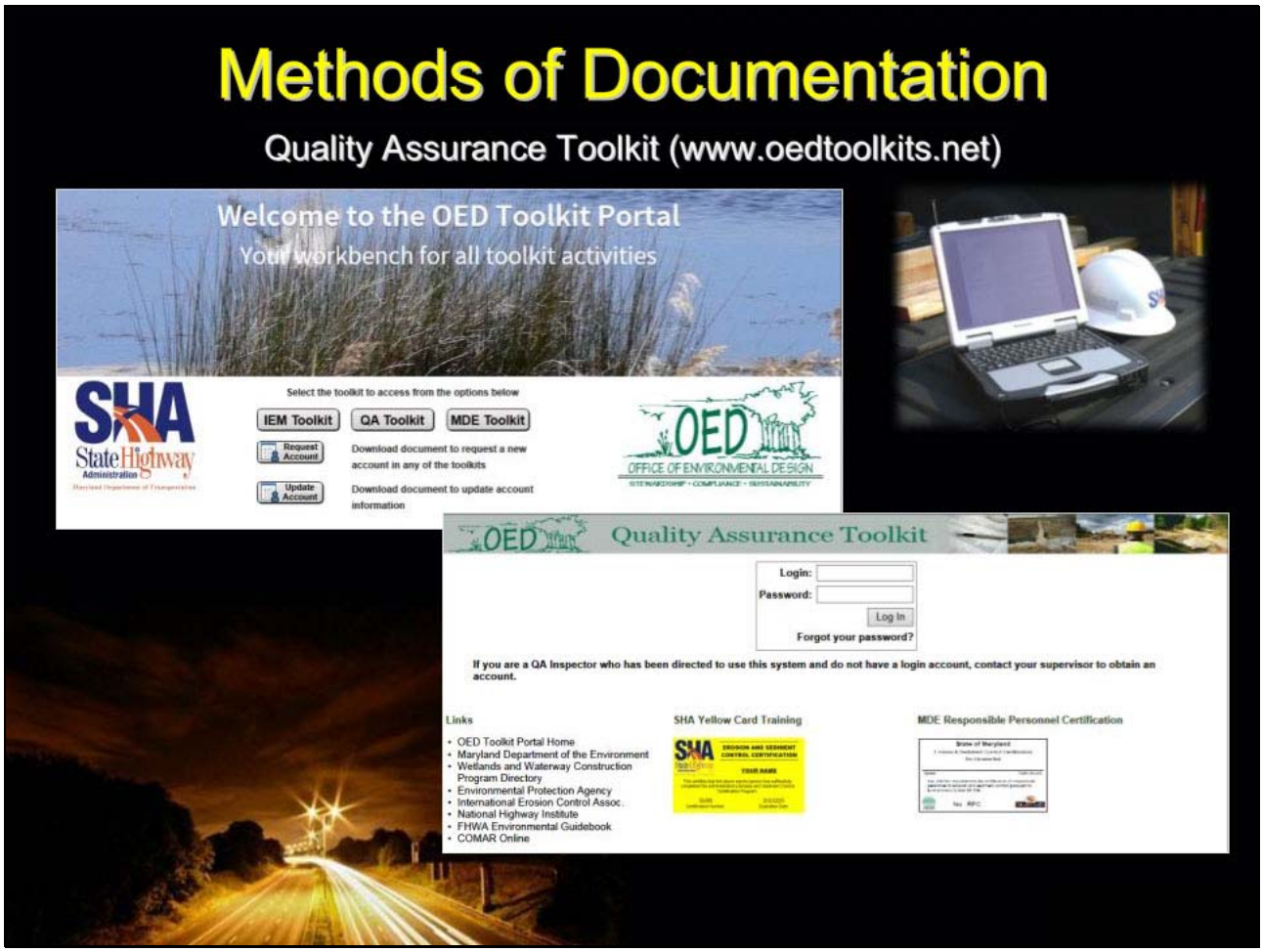


Slide notes

Completion of this four page checklist is a requirement of the N.P.D.E.S Permit. It is completed weekly and next day after a runoff producing rain event. Corrective actions must be documented on this form. It is also a requirement for the checklist to be completed for the duration of the project and until the notice of termination is submitted and approved by M.D.E. The completed reports are to be maintained at the project field office.

Notes

Slide 19 - Slide 19



Slide notes

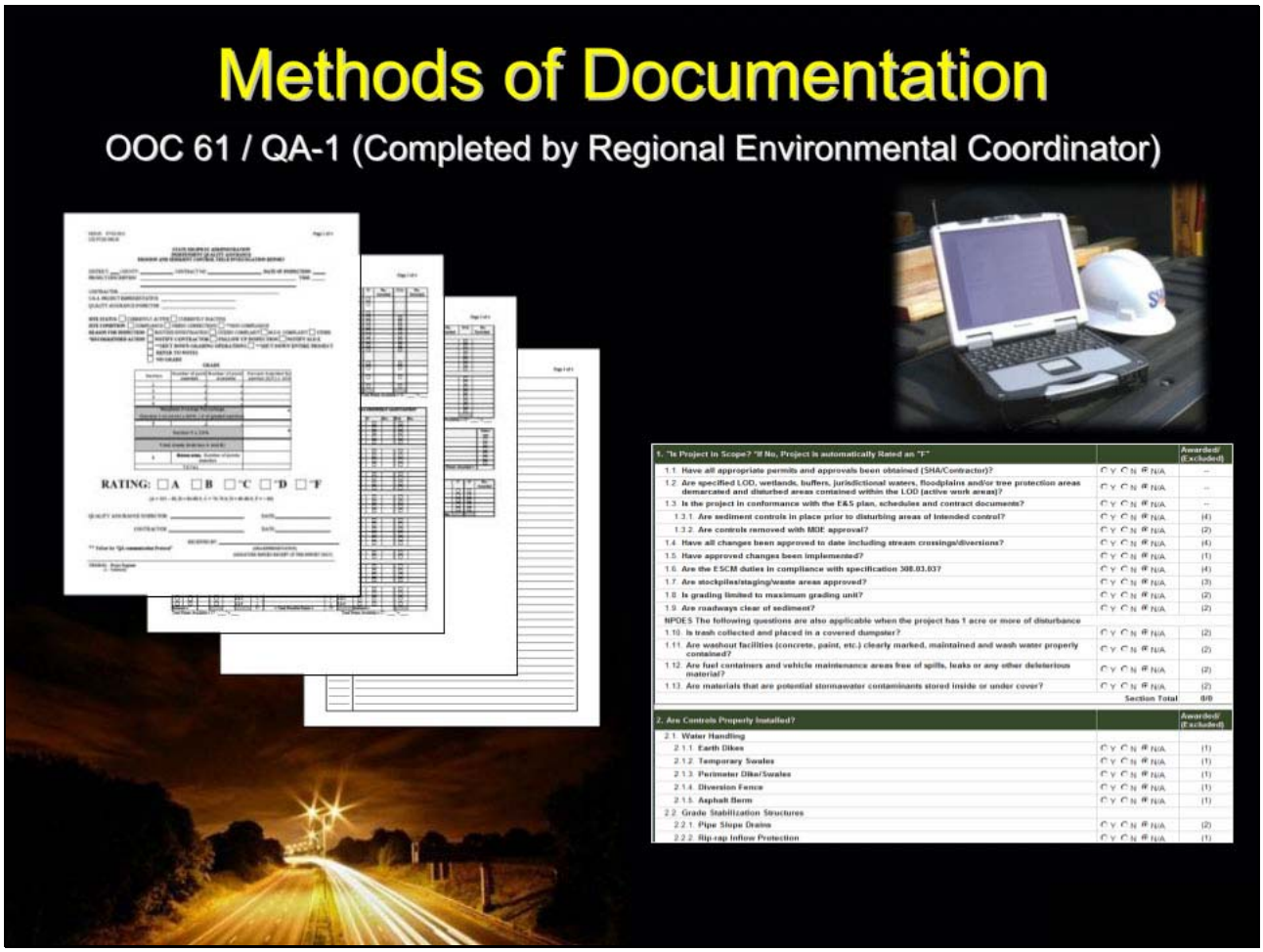
The OOC 61 will be utilized on projects for the completion of a quality assurance review by the regional environmental coordinator. When looking at this checklist it combines 2008 specification information as well as the N.P.D.E.S standard inspection form. This form utilizes a weighted graded system that puts emphasis on timelines of corrective actions to match the current S.H.A specifications. Section 5 of this form is now worth 20 percent of the entire grade. The form has the ability to be utilized on all projects for QA review. Only the projects with one acre or more of disturbance will be required to complete the questions related to the N.P.D.E.S.

The QA Toolkit is a Web-based technology and is accessible to users who have accounts. This online reporting and database system can provide real time access to QA inspection reports and project information. This toolkit is utilized by the REC for completion of the OOC 61 report. QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA programto allow more inspections to maintain an even higher level of compliance.

The Quality Assurance Toolkit is a Web-based technology and is accessible to users who have accounts. Accounts may be requested by completing the form available at "www.O E D toolkits.net". This online reporting and database system can provide real time access to project information such as QA-1 reports or modification request status.

Notes

Slide 20 - Methods of Documentation



Slide notes

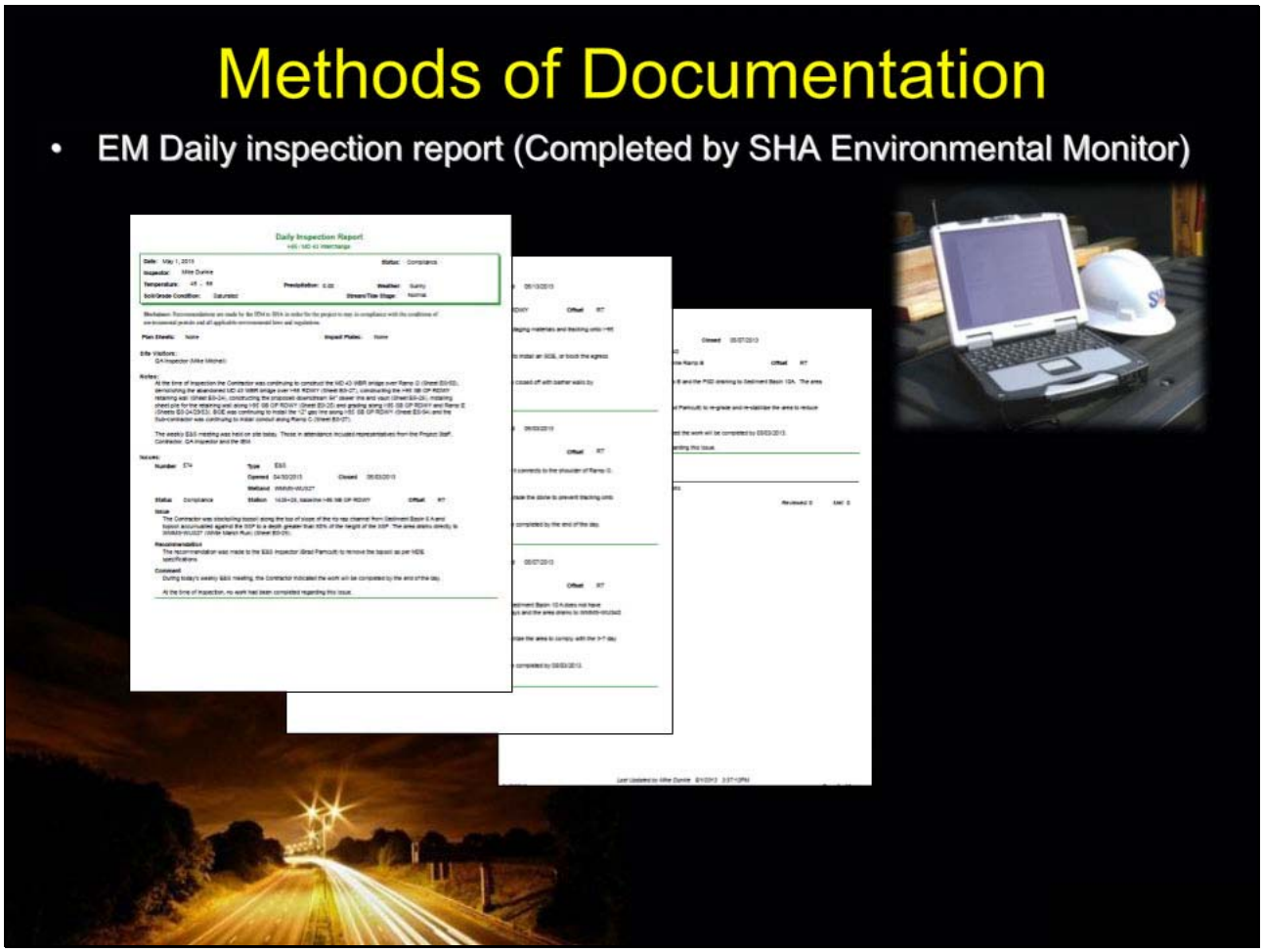
The QA-1 will be utilized on projects for the completion of a quality assurance review by the regional environmental coordinator. When looking at this checklist it combines 2008 specification information as well as the N.P.D.E.S standard inspection form. This form utilizes a weighted grading system that puts emphasis on timelines of corrective actions to match the current S.H.A specifications. Section 5 of this form is worth 20 percent of the entire grade. The form has the ability to be utilized on all projects for QA review. Only the projects with one acre or more of disturbance will be required to complete the questions related to the N.P.D.E.S.

QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA program to allow more inspections to maintain an even higher level of compliance.

The QA Toolkit is a Web-based technology and is accessible to users who have accounts. This online reporting and database system can provide real time access to QA inspection reports and project information. This toolkit is utilized by the REC for completion of the QA-1 report. QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA program to allow more inspections to maintain an even higher level of compliance.

Notes

Slide 21 - Methods of Documentation

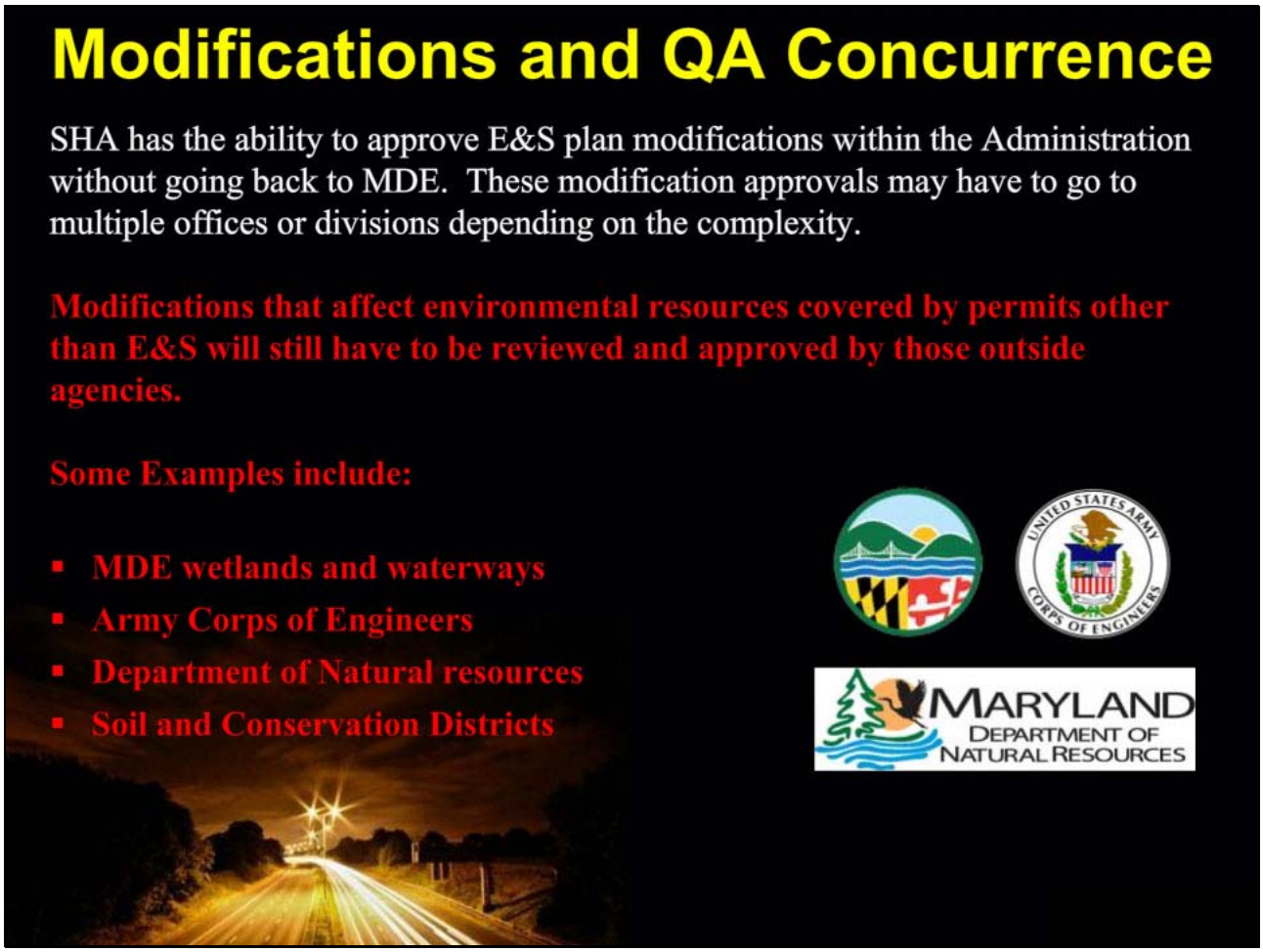


Slide notes

The E.M. Toolkit is a Web-based technology and is accessible to users who have accounts. This online reporting and database system can provide real time access to independent environmental monitor inspection reports and project information. This toolkit is utilized by the IEM for completion of the IEM daily inspection report. IEM reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies.

Notes

Slide 22 - Slide 21



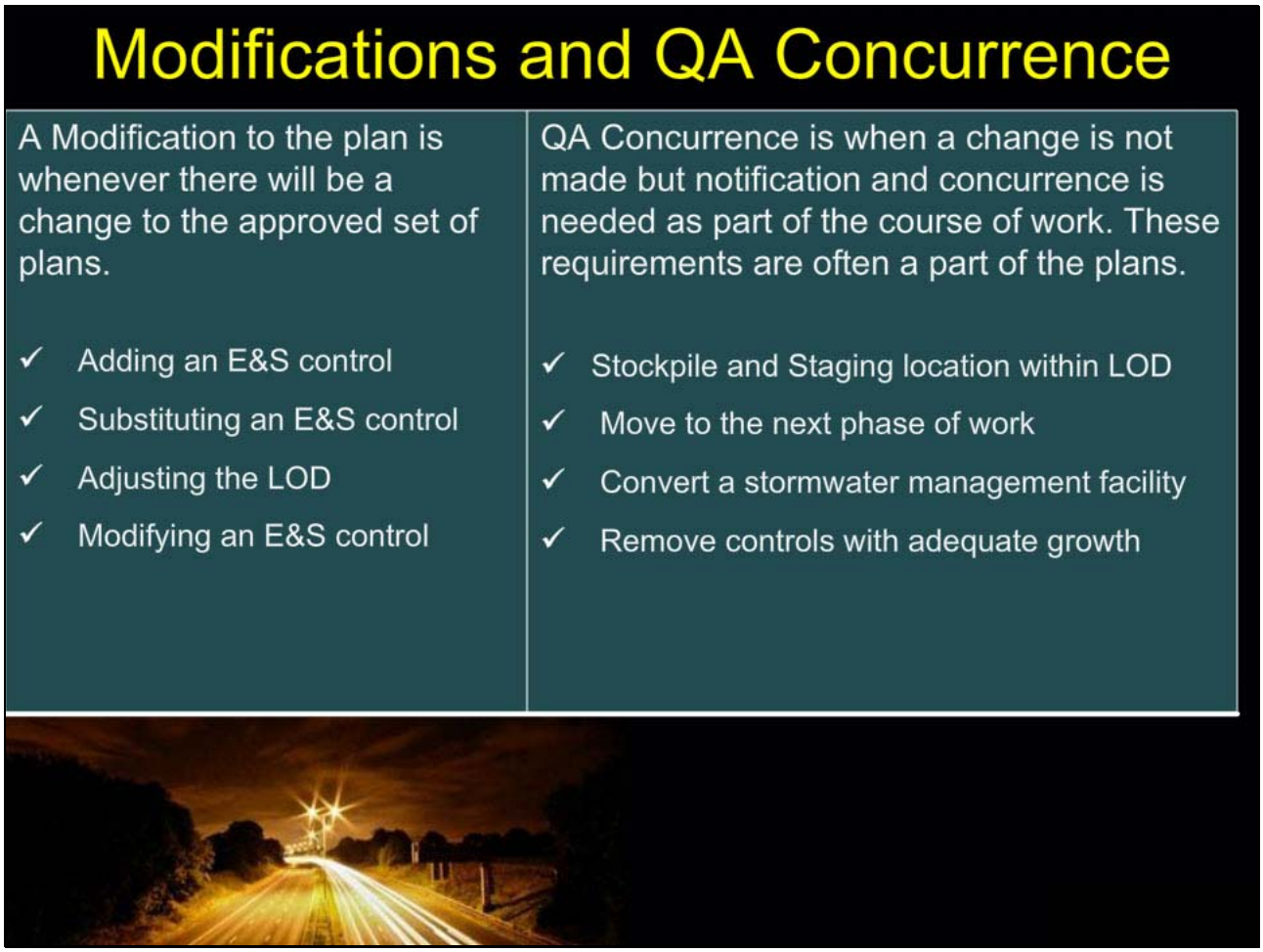
Slide notes

When an E & S modification is needed there is a specified method of getting approval. There is currently an agreement between MDE and SHA that does allow plan modifications. Please consider that these modifications may take some time for approval to be obtained and the work cannot be done without that approval.

Keep in mind that if a modification affects an environmental resource such as a wetland or waterway then there may be multiple other agencies that must also agree with the modification. An example of this would be a change to a stream diversion; this would require MDE wetland and waterways to agree along with the US Army Corps of Engineers.

Notes

Slide 23 - Slide 22

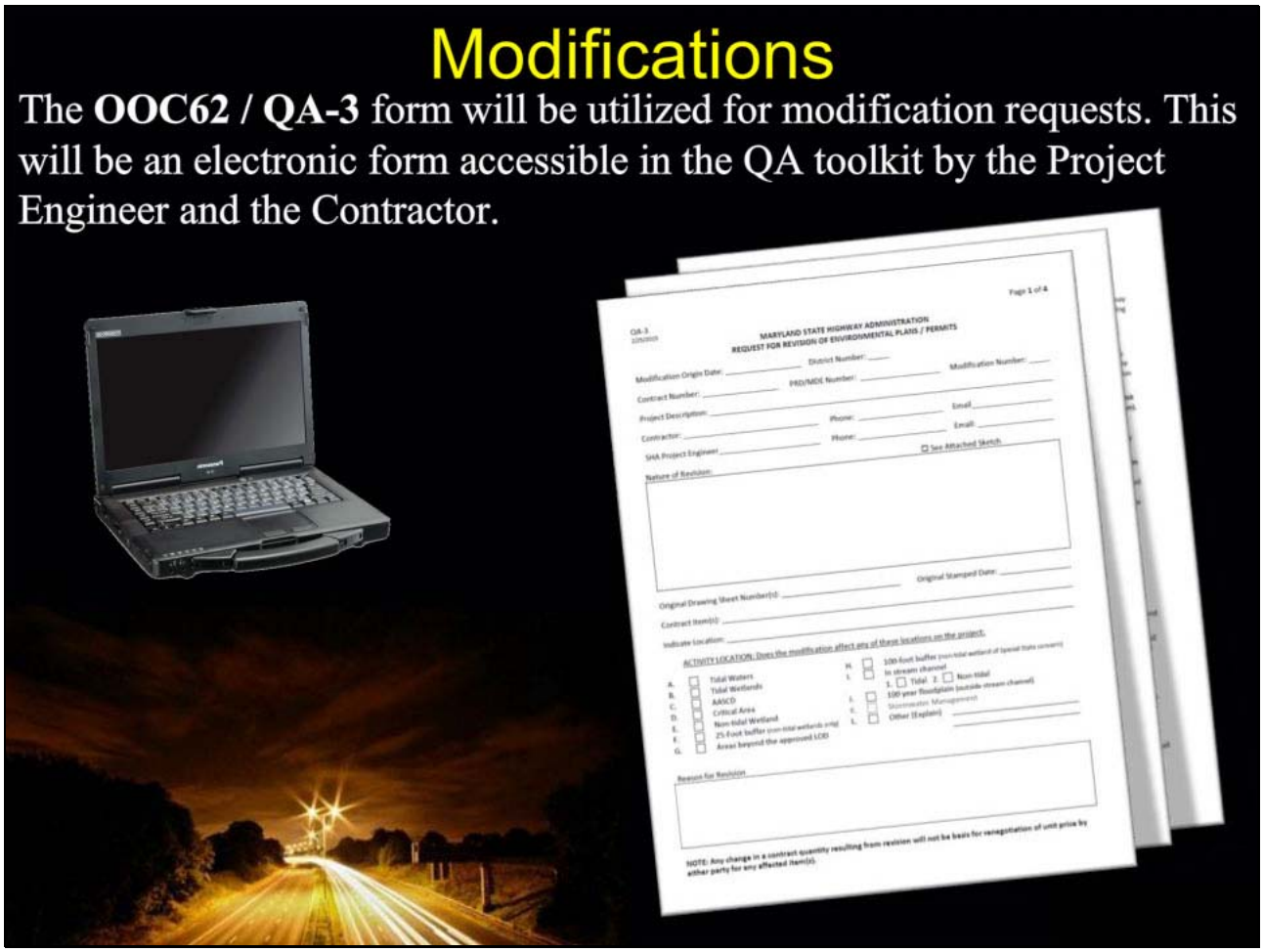


Slide notes

When considering a modification request, keep in mind that there is a difference between when a modification is needed and when QA concurrence is needed. A modification is a true change to a plan or permit. When permission is needed to continue work according to the plan but no actual change is occurring that is a QA-concurrence. Often the need for QA concurrence will be outline on the plans

Notes

Slide 24 - Slide 27

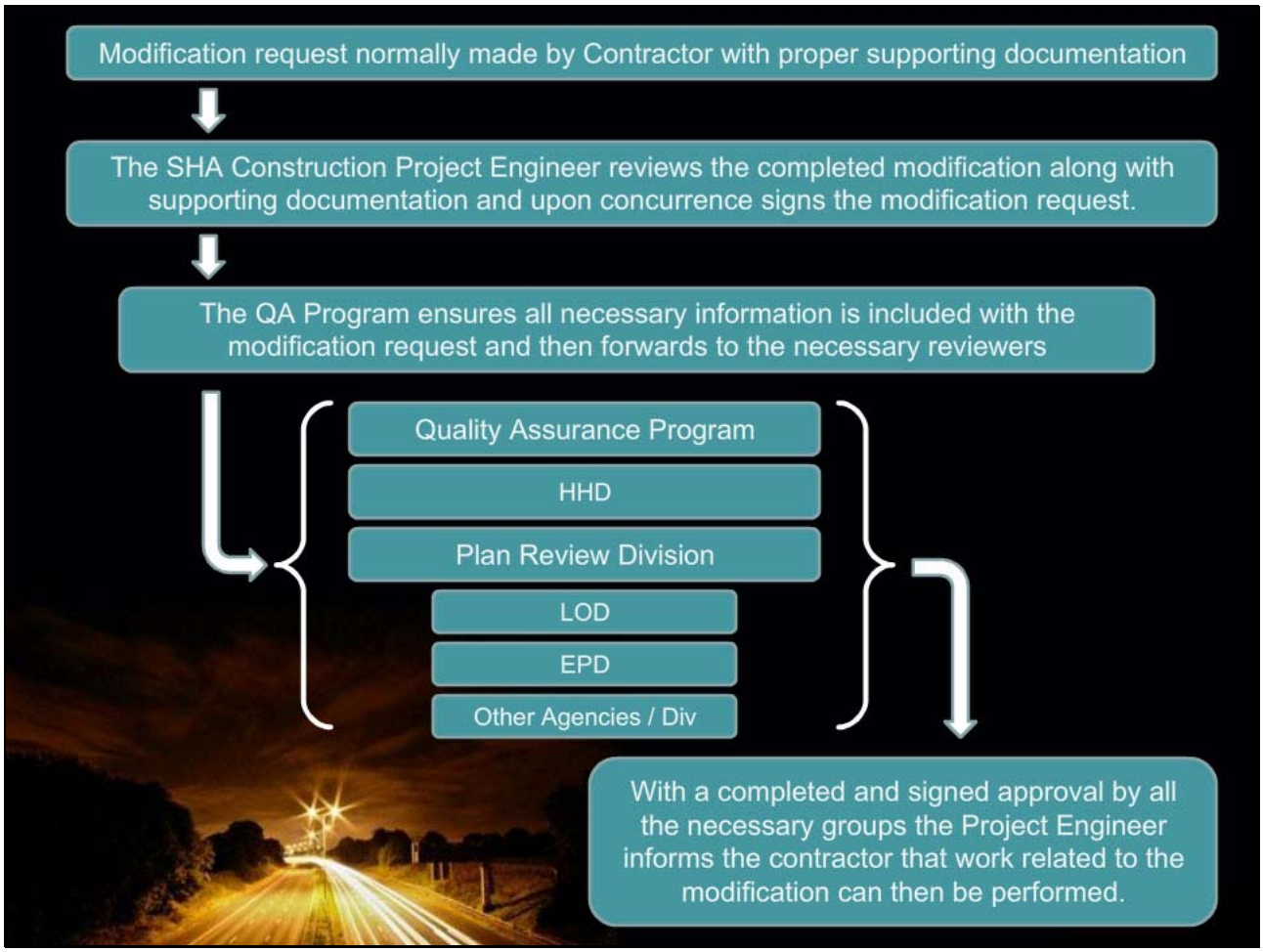


Slide notes

The QA-3 form within the QA toolkit is utilized for the modification process. A plan mark-up should also be included with the request.

Notes

Slide 25 - Slide 24

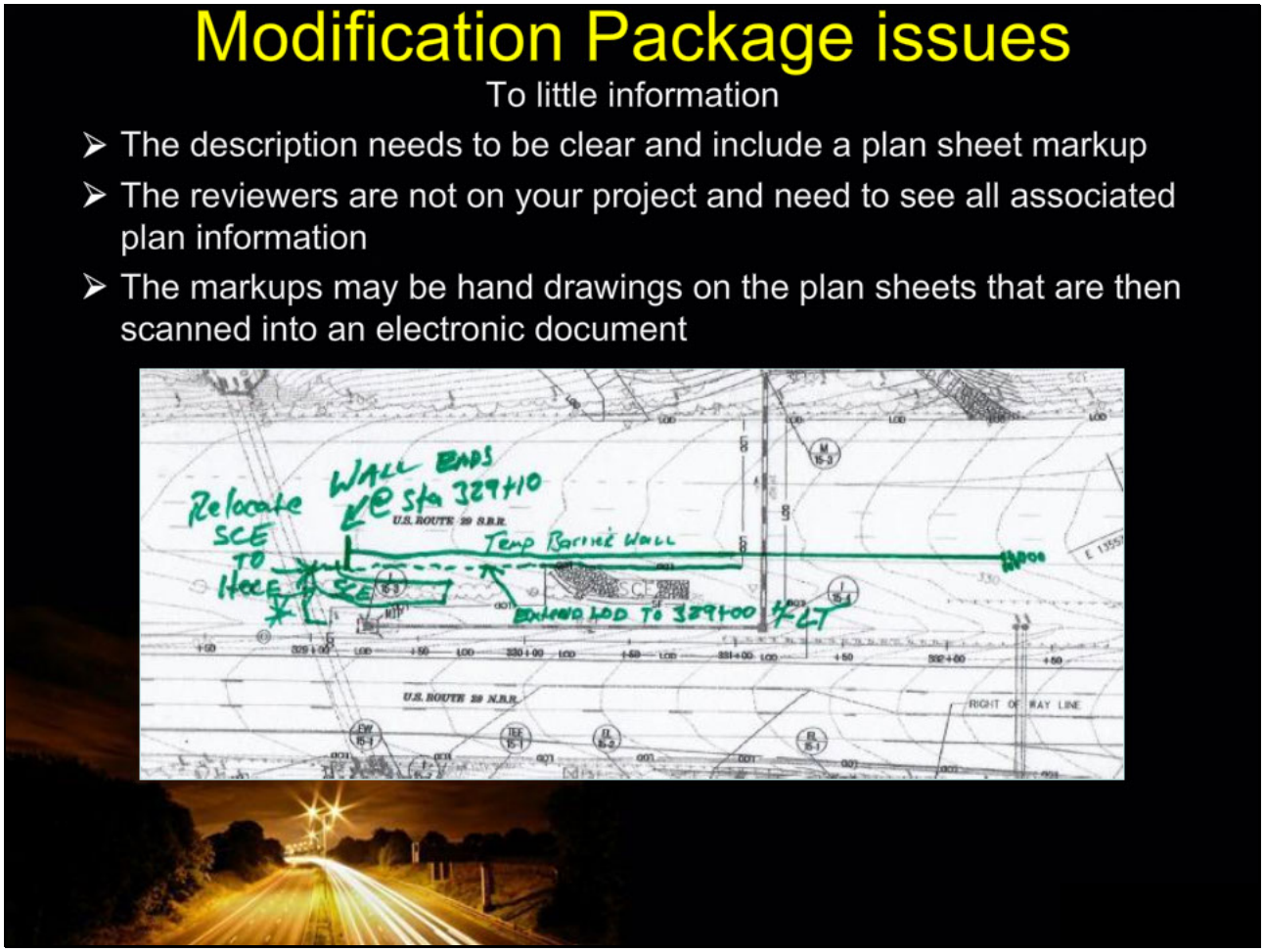


Slide notes

Here is the process to be followed when seeking a plan modification. The contractor may submit the modification and the SHA project engineer will review the plans and permit conditions for any conflicts. If the Project engineer concurs with the modification then the associated information should be submitted through the QA Toolkit for review. The QA program will oversee the process to ensure the correct reviewers see the request. The QA toolkit is designed to notify all stakeholders of the most recent status of their request through e-mail. Remember, the REC can only approve QA concurrence requests, any modifications should go through the established process.

Notes

Slide 26 - Slide 28



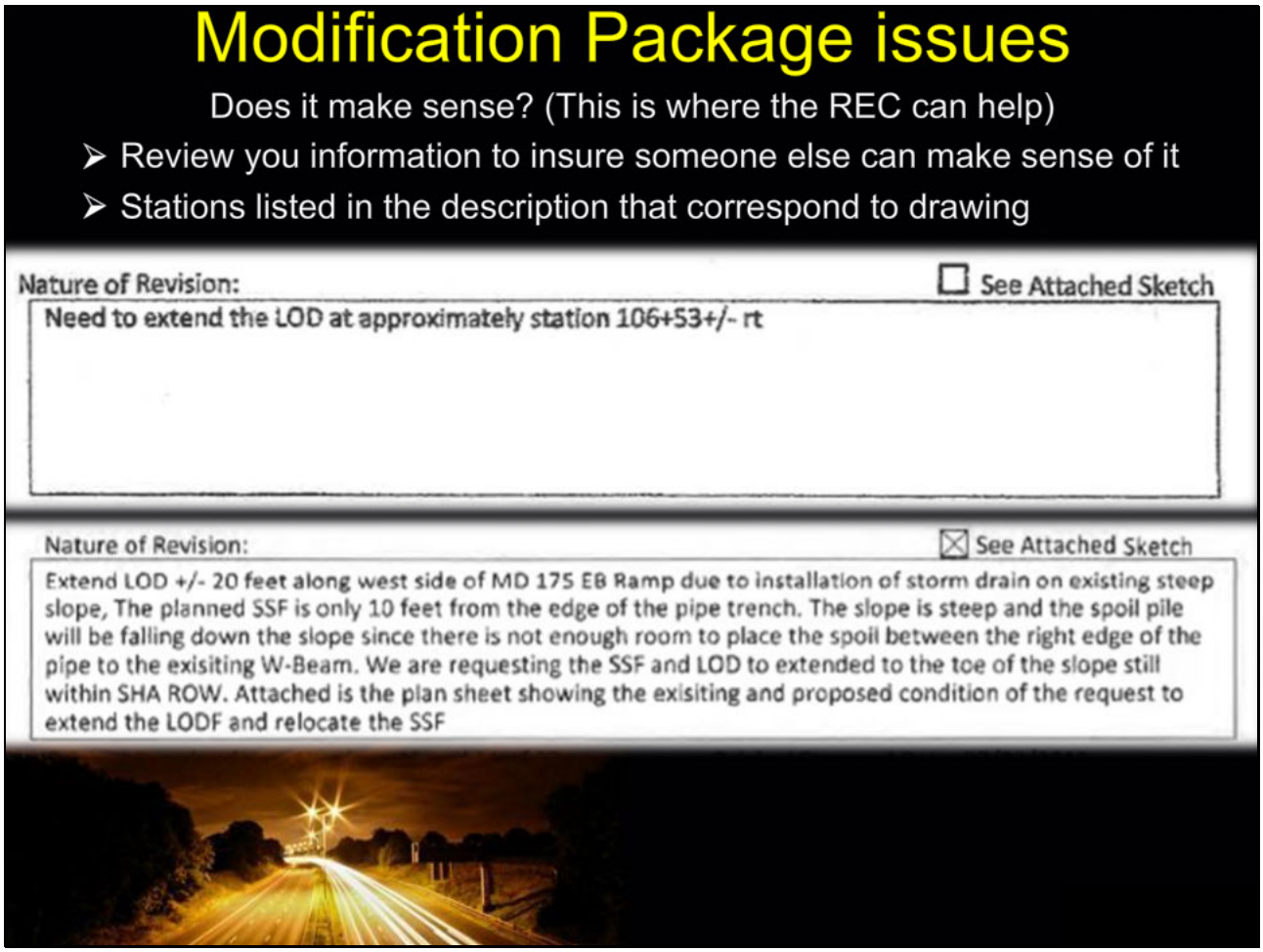
Slide notes

Let's look at some of the information that should be included with a modification request. The request should include a clearly marked plan sheet. This drawing must include the north arrow and signature block of the pages that the modification affects.

Remember that the reviewers may have never been to your project sight and therefore need as much information as possible in order to make an informed decision. Including a photo of the area can also be a key piece of information in the review process.

Notes

Slide 27 - Modification Package issues

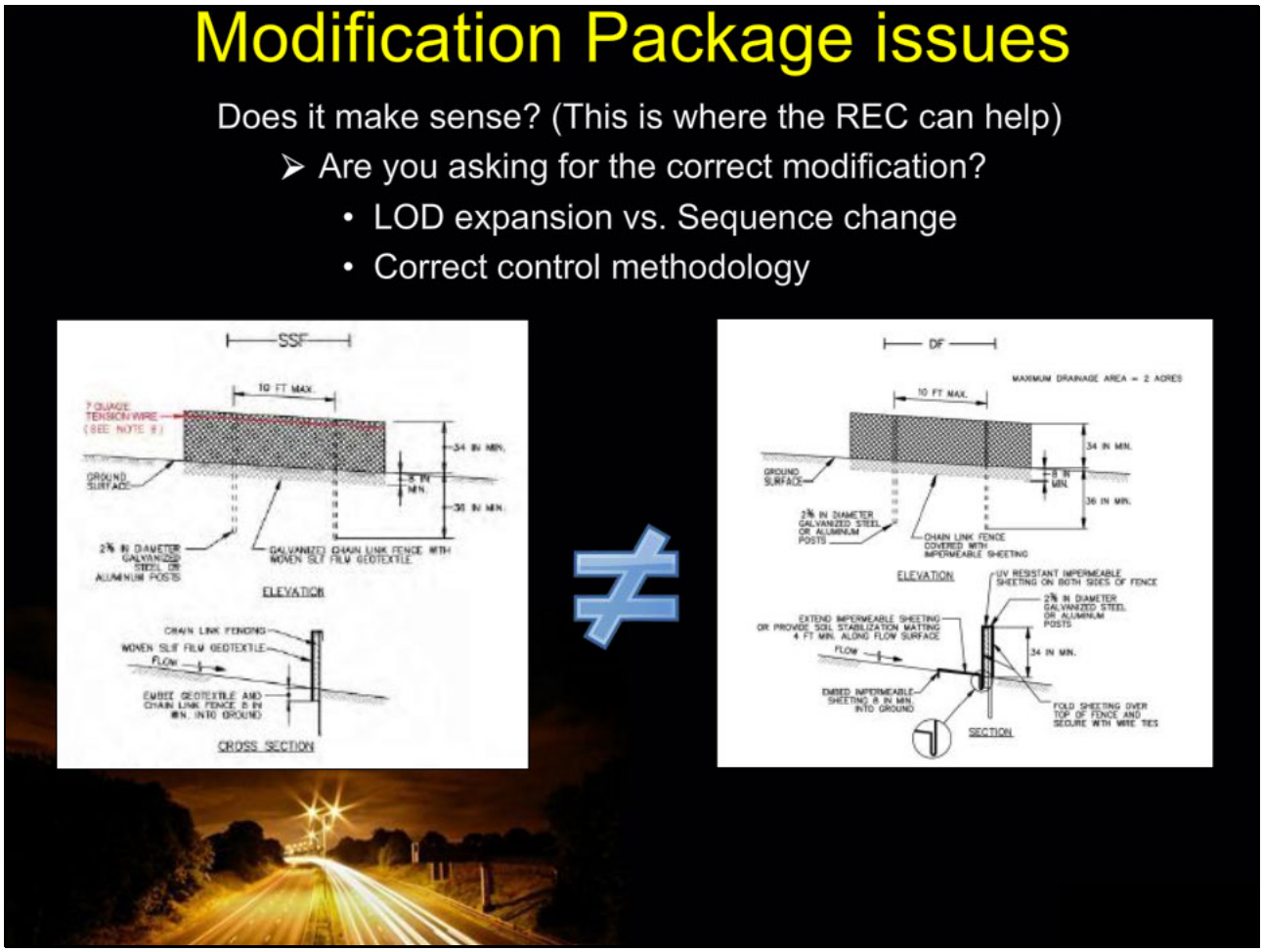


Slide notes

Providing enough information is critical. Limited information could result in a denial of the request or multiple responses asking for additional information. The narrative should reflect exactly what is being requested.

Notes

Slide 28 - Modification Package issues



Slide notes

Ensure that the request makes sense. The example shows that super silt fence is not an alternative to diversion fence. These two devices are differing control methodologies. Super silt fence is a filtering method while diversion fence is a conveyance method.

Notes

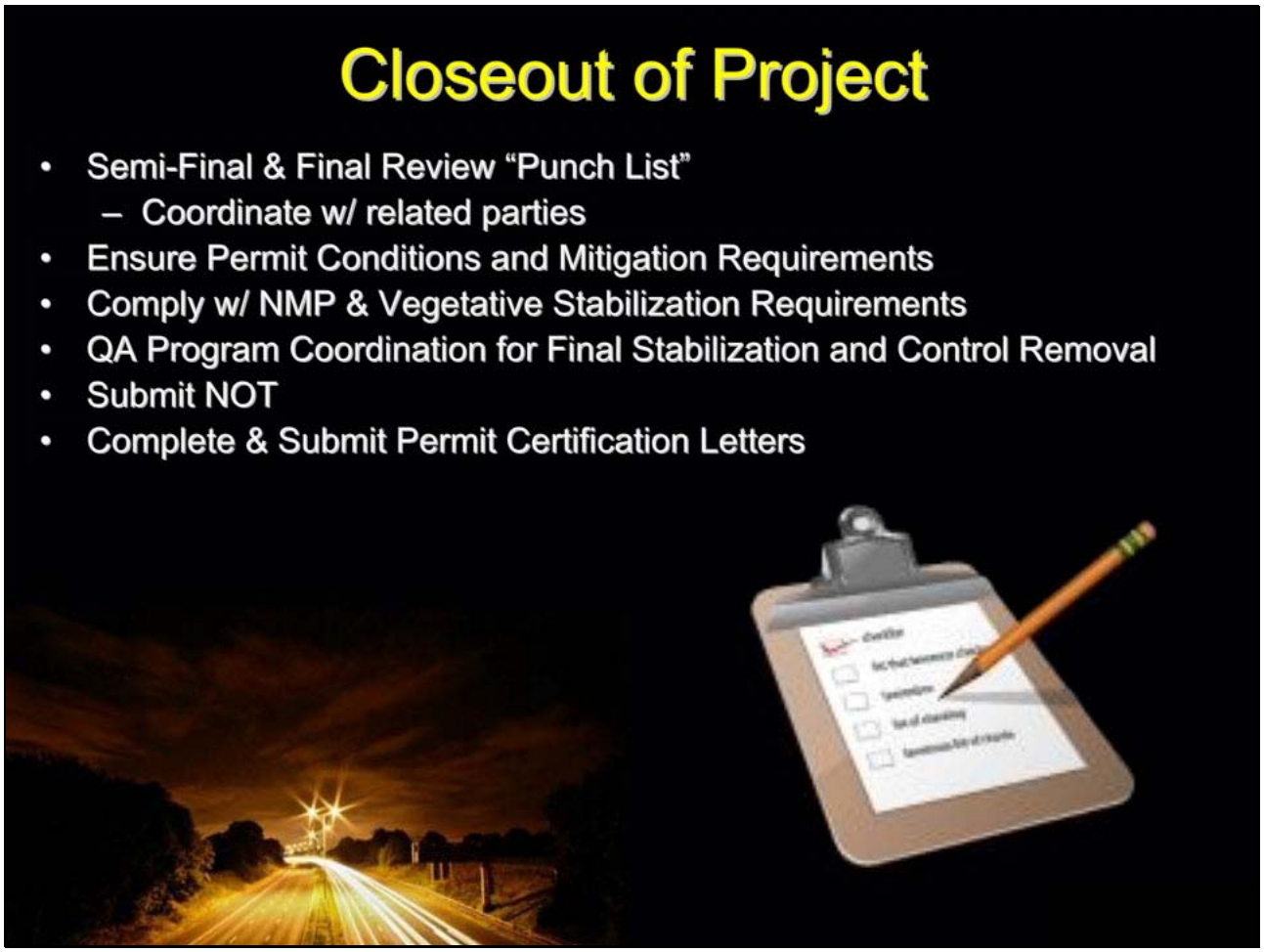
Slide 29 - Permit Modification Support Divisions

Slide notes

The project may contact the Administration's support divisions for assistance. They are the engineers who work directly with the regulatory agencies. Contact the Regional Environmental Coordinator (REC) with any questions.

Notes

Slide 30 - Closeout of Project



Slide notes

When a project is complete there are still a few steps necessary to close-out the project. A final review will be held by the District office. It is important to ensure all permit conditions have been met along with the stabilization requirements. MDE must give approval to remove the final controls and the Administration’s District representatives must complete and submit the notice of termination and permit certification letters.

Notes

Slide 31 - End

Slide notes

This concludes the organization and documentation portion of the training. Please select the next module to continue the training

Notes